

What is claimed is:

1. A wireless display system composed of an image display device and a data processing device connected through wireless communication means, said wireless display system comprising:

5 data input and output means for input and output of data in and from said image display device,

input and output data converting means for converting data format and protocol in said wireless communication means, and

10 input and output processing virtual means for making virtual data input and output process in said data processing device as if the data input and output means were connected directly,

wherein said data input and output means and input and output data converting means are provided in said image display device,

15 said input and output processing virtual means is provided at said data processing device side, and

all data about data input and output communicated between said image display device and data processing device are mutually transmitted and received through said input and output data converting means and input and output processing virtual means.

20 2. The wireless display system of claim 1,

wherein said image display device further comprises power saving control means, and said power saving control means sets the image display device in first power saving mode when the image display device is not operated for a specific time.

25 3. The wireless display system of claim 2,

wherein said power saving control means sets the image display device in second power saving mode for saving more power than in first

power saving mode when the image display device is in first power saving mode, and the data input and output means is not used for a specific time.

SM A2

4. The wireless display system of claim 2 or 3,
wherein said image display device further comprises display means
5 for displaying the image and operating means to be operated by the user,
and said power saving control means sets said display means and operating
means in power saving state in the first power saving mode.

5. The wireless display system of claim 1, 2 or 3,
wherein said wireless communication means comprises means for
10 measuring the communication rate of all data including the image data
transmitted from the data processing device and displayed in the image
display device, and the communication rate of the wireless communication
is controlled by decimating the updating of the image data at specific
intervals when the communication rate exceeds a certain rate of the
15 effective communication rate of the wireless communication.

5. The wireless display system of claim 1, 2 or 3,
wherein the data from said data input and output means is used for
connection verification in wireless connection between the data processing
device and image display device, or for user authentication in the data
20 processing device.

SM A3

6. The wireless display system of claim 1, 2 or 3,
wherein said input and output means is universal serial
communication interface.

7. The wireless display system of claim 1, 2 or 3,
25 wherein said data input and output means is at least one of
barcode reader, tester, digital cameral, card reader, scanner, and GPS.

8. A method of communication of wireless display system having

said image display device and data processing device comprising the steps of:

(a) entering and producing data in and from said image display device,

5 (b) converting data format and protocol in the wireless communication, and

(c) processing input and output in said data processing device virtually as if data input and output processing were done directly,

10 wherein step (a) and step (b) are done at the image display device side, step (c) is done at the data processing device side, and all communication data between said image display device and data processing device is processed at step (b) and step(c), and is mutually transmitted and received.

15  A computer program recording medium for executing communications of wireless display system having said image display device and data processing device comprising the programs for:

(a) entering and producing data in and from said image display device,

20 (b) converting data format and protocol in the wireless communication, and

(c) processing input and output in said data processing device virtually as if data input and output processing were done directly,

25 wherein program (a) and program (b) are executed at the image display device side, and program (c) is executed at the data processing device side, and all communication data between said image display device and data processing device is transmitted and received by execution of program (b) and program (c).